ACAS

Technical

Documentation

d i g i t a l™

Digital Equipment Corporation

(A wholly owned subsidiary of Compaq Computer Corporation)

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Section 1 - ARCHITECTURE & SYSTEM DIRECTORIES

General Notes

The ACAS system is configured on a Windows NT 4.0 Operating System with Service Pack 3, running Microsoft Internet Explorer 4.0 with Service Pack 1.   The screens and script were constructed using Microsoft Visual Interdev 6.0, HTML 4.0, Active Server Pages 2.0, VBScript, JScript, JavaScript, and Visual Basic 6.0 ActiveX components. Individual source files that make up ACAS are mostly .asp (active server pages), .htm (html files), .inc (include files), .dll (dynamic link libraries), .css (cascading style sheets), and .vbp (visual basic project files).   Of these types, most of the source files are .asp files and .htm files.

ODBC and Universal Data Access, ACAS_USERS

The application uses the ODBC driver "Microsoft ODBC for Oracle 2.573.292700", with a UID of ACAS_QUERY and a server id of ALIS_PRODB. The specific database connection settings are located in the file global.asa (included with the source). On the server, Oracle Client 7.3.3 software is installed, followed by Microsoft UDA 2.0 (Universal Data Access). This process sets up required ODBC drivers. The order of installation is significant, otherwise system errors may occur. Lastly, installation of 2 patches for SQLNet is performed, which brings the version number up to 7.3.3.4. These patches can are downloaded from Oracle.

All database tables that become available from this data connection are originally from the ALIS system, with one exception. A special ACAS related table, ACAS_USERS, is provided for the purpose of storing ACAS user account information. For user accounts that are set up for legislators, the OID_PERSON field within this table record structure will contain the system id that uniquely identifies the person who is filling the incumbency.

Microsoft Internet Information Server (IIS)

An ACAS web service was created on site using Internet Information Server 4.0, via the Internet Service Manager under Windows NT Option Pack 4.0 (in the Start/Programs menu). This establishes the Web server that is integrated with Windows NT Server. It holds the database connections and provides server side ASP processing for the ACAS application.

WINNT Replication

The WINNT Replication feature is provided by the NT Server Operating System, located at

>   *MyComputer/ControlPanel/Server/Replication*

It replicates directories from ALIS to the ACAS Web Root. This ensures that ACAS contains the current data files generated from the ALIS system.

Two directories beneath the ACAS Web Root, named CodeofAlabama and SearchableInstruments, are set to replicate with a 1 minute cycle time; all other subdirectories are locked so that replication doesn't occur. The variable used for this cycle time is located in the Registry at

HKEY_LOCAL_MACHINE/SYSTEM/ControlSet001/Services/Replicator/Parameters/Interval

and can be adjusted (minimum is 1 minute).

Acrobat Reader Installation

If you are running with Acrobat Reader 3.01, a patch is required, called the *autoclos* plugin. This comes in the form of two files, *autoclos.ini* and *autoclos.api*, available in the \\ACAS\distribution folder.   The first file goes in the WINNT folder on your C drive, and the second goes in the folder C:\Acrobat\Reader\Plug_Ins. This enables you to pull up as many consecutive PDF files as you wish. Without the patch, an error may occur after the 10th document is retrieved.   It is recommended that you download the 3.02 version, which takes care of the problem without requiring the patch.

Under the ADMIN tab, the option *Software Components* provides a button to download Acrobat Reader 3.02.   Before this is done, any previous versions of this product must be manually uninstalled. If a prior version already exists on your PC, you will find an uninstall option beneath Adobe Acrobat in Start. Simply uninstall the product, then step through the process of re-installing 3.02 using the button in ACAS. Several reports in ACAS require Acrobat Reader, including First Reading, Second Reading, Calendar, and all Enrolled, Engrossed, or Introduced documents.

The number of PDF documents that can be open at the same time is determined by the *MAXOPENDOCUMENTS* property in the *Acroread.ini* file located in your local WINNT directory. You can change this integer setting to a different number for either version of Reader.   If you are using Reader 3.01, you also need to change the *MAXDOCS* property in the AUTOCLOS.INI to equal the integer value you set in the *Acroread.ini file*.

Downloading Objects Option
Under the ADMIN tab, there's a button to download ACAS objects. Be sure to allow a restart of your computer when prompted. Failure to do so will cause Internet Explorer to crash.

Security for Root Web Directory

Security has been established for the ACAS root Web directory. *Read* and *Execute* access was given to this main ACAS directory, and set for domain users and administrators.   Only ACAS users in the ACAS_USERS table will be allowed access to the ACAS application. Six currently existing special accounts from the ALIS domain also have access to the root Web directory for ACAS.

The intent is to block ALIS users from gaining unauthorized access to ACAS. It is assumed that ACAS users can't access ALIS directories.

Crystal Report Server Components

On the server, Web Server Components for Crystal Reports 6.0 is installed. For those ACAS users whose workstations do not have Crystal Reports installed, this installation step allows a product called Smart Viewer within IIS to be used in displaying any Crystal Reports from ACAS. The Status Sheet and Day's Activities reports are the two Crystal Reports that are accessible from the ACAS menu options. The layout of the SmartView viewer is contained within the ACAS frame, and provides user controls without any developer buttons appearing.

ActiveX Components

The ActiveX components used by ACAS need to be built under the WINNT Service Pack 3 Operating System, not Service Pack 4. Problems have been experienced on site when running SP4 built ActiveX components on a system only running with SP3.
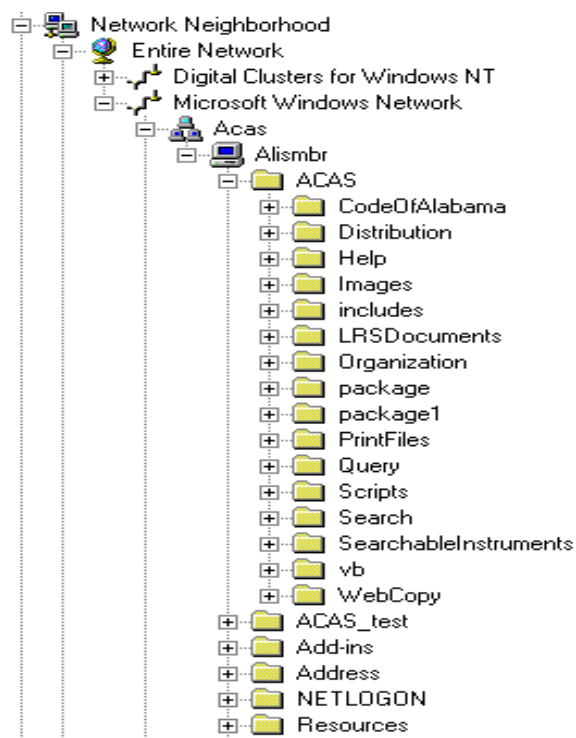
Desktop Resolution Settings

Desktop Area resolution should be 1024 x 768, using font size of Small Fonts, with a color palette of 256 colors. Optimal ACAS window real estate is full screen.
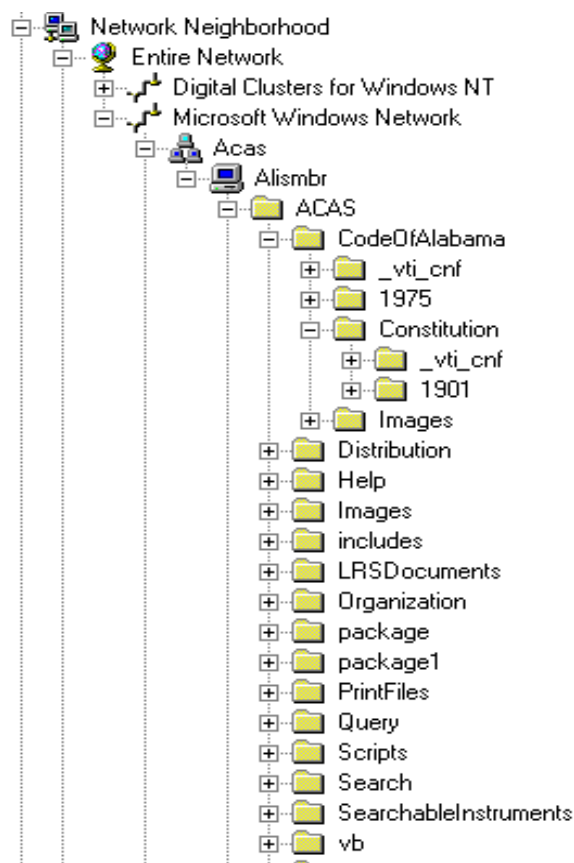
Remote Windows Setting

The number of remote windows that can be open at one time can be adjusted within a function defined in ACASLogin.asp called OpenRemoteWindow. This setting may optionally be changed to show, for example, just one window of each type.

ACAS Directory Structure

The ACAS folder contains the principle source code used to run the application. Files of type .asp and .htm are stored here. Files of type htx, htw, and idq are also located here, and are required by the special searching utility that is provided for looking up text or keywords in bills, resolutions, the Code of Alabama, and the Constitution. Subfolders beneath ACAS that begin with an underscore are virtual directories created by IIS (Internet Information Server) and its Active Server Pages component (obtained from WINNT Option Pack 4 as part of standard ASP installation under WINNT).

Code of Alabama Folder

Beneath this folder are two subfolders, one for Constitution and one for 1975 (referring to the 1975 Code of Alabama).   Beneath each of these folders are thousands of .htm files that make up the online version of the Constitution and the 1975 Code.   Microsoft Index Server and the Microsoft Management Console (MMC) tool enables the indexing of these files for significant improvement in runtime response.   Over time, when performing a search in ACAS, you may receive a message on the ACAS window indicating that the index is out of date.   When this happens you must reset the index on the appropriate directory using the Microsoft Management Console application.

Distribution Folder

This folder contains the .exe to download the runtime version of Adobe Acrobat Reader 3.02. It also contains two files that are plug-ins for the 3.01 version, should that be required. See the Readme.txt file in this folder for a description of the simple steps involved in installing this patch.

Help Folder

Here are the ACAS documentation files exported from Pagemaker into PDF files. They make up the online help subsystem. The Help tab in the upper right hand corner of the ACAS screen is tied to these files, enabling them to appear online just as they appear in the ACAS documentation set. This tech doc file is located there as well.

Images Folder

Miscellaneous images (usually .gifs and .jpgs) are used in ACAS to give the application many of its special visual effects.
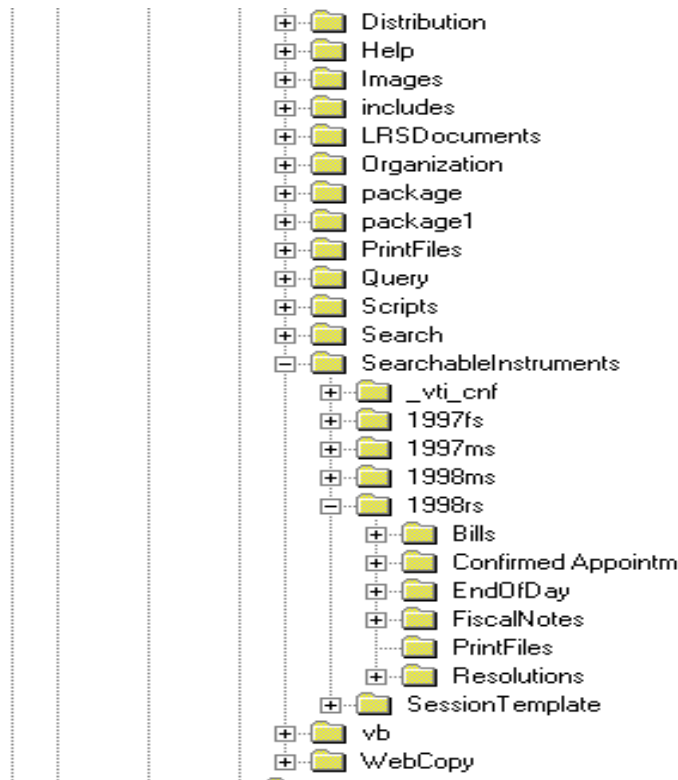
Includes Folder

This folder contains .inc files referenced by .asp files in the main ACAS directory. Frequently it becomes more efficient to write a commonly used set of Jscript, JavaScript, or VBScript code and to put it in one place (a .inc file). Then, other .asp files can include a reference to that file. The included source code becomes available to the IIS server when it processes any script code received.   All referenced include files are stored in this central location.

Package Folder

This folder contains various .dll and .cab files needed for the ACAS environment to download the ACAS ActiveX components.

SearchableInstruments Folder

```
⊞ 📁 Distribution
⊞ 📁 Help
⊞ 📁 Images
⊞ 📁 includes
⊞ 📁 LRSDocuments
⊞ 📁 Organization
⊞ 📁 package
⊞ 📁 package1
⊞ 📁 PrintFiles
⊞ 📁 Query
⊞ 📁 Scripts
⊞ 📁 Search
⊟ 📁 SearchableInstruments
   ⊞ 📁 _vti_cnf
   ⊞ 📁 1997fs
   ⊞ 📁 1997ms
   ⊞ 📁 1998ms
   ⊟ 📁 1998rs
      ⊞ 📁 Bills
      ⊞ 📁 Confirmed Appointm
      ⊞ 📁 EndOfDay
      ⊞ 📁 FiscalNotes
         📁 PrintFiles
      ⊞ 📁 Resolutions
   ⊞ 📁 SessionTemplate
⊞ 📁 vb
⊞ 📁 WebCopy
```

This folder contains files that are specific to legislative sessions. Each legislative session has its own subfolder, as shown with 1998rs (regular session) in the above figure. Beneath this level are six subfolders that contain .htm, .rpt and .pdf files to be viewed within the ACAS browser environment.

- Bills and Resolutions available to ACAS processing are stored in the Bills and Resolutions folders.

- Any End of Day reports available from the ACAS menu will be stored in the EndofDay folder.

- Fiscal Notes contains files relating to the fiscal note information associated with instruments.

- PrintFiles contains .pdf files that are displayed via the View/Copy tab in the action bar. The name format includes a -enr, -eng, or -int (as in sb65-int.pdf), which refers to the type of file (Enrolled, Engrossed, or Introduced).

Files with a .rpt type are Crystal Report files, such as the Day's Activity Report and the Current Status Report. These are viewed with Smart Viewer, as mentioned earlier in this document. You must still download the Crystal Reports DLL from the Software Components option in the Admin tab. These reports are originally generated out of the ALIS system.

Files with a .pdf type are Portable Data Format files, and are viewed with Adobe Acrobat Reader. This tool must also be downloaded from the Software Components option in the Admin option. Examples of this file type are the First Reading and Second Reading reports. These reports are also generated from the ALIS system.
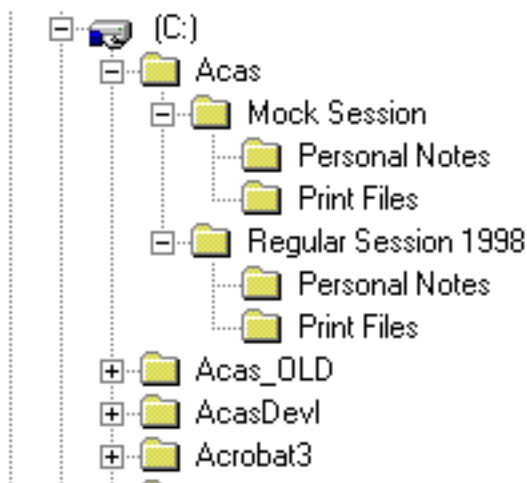
VB Folder

This folder contains auxilliary Visual Basic files used to build the ACAS components.

Section 2 - LOCAL HARD DRIVE DIRECTORIES

General Notes

The My Notes feature of the ACAS application offers a useful way to track personal memos on specific instruments. When you choose this option from the action bar, and store memo information to be saved, files are created in folders beneath a directory identified by the session variable ACAS_LocalRoot in global.asa.

You may choose to copy instrument files of type enrolled, engrossed, or introduced to your hard drive. You can also copy amendments and substitutes to your hard drive.

Notice the separate subdirectories for each legislative session available to the system. Beneath the folder labeled *Regular Session 1998,* there is a folder called *Personal Notes*. The My Notes information you save in the ACAS application is stored here, in the form of .txt files. When you have text to save, the form of the filename becomes 'instrumentlabel'.txt, where instrument label would be, for example, sb3 for the label SB3.   If you choose the smiley option, the name of the file becomes sb3(Approve).txt. If you choose the frown icon option, the name of the file becomes sb3(Disapprove).txt

Just below this folder is another folder called *Print Files*. When you choose the View/Copy option from the action bar, you can choose the option *Copy to Hard Drive*. This folder is where the file is copied, in the form of a .pdf file.   If the file already exists, a message will display telling you this. You can either proceed or cancel the copy operation at this point.

Section 3 - ASP VARIABLES & LOGIN PROCESSES

General Notes

The ACAS environment uses Active Server Page features known as Application variables and Session variables. At login, these variables are pre-loaded with values from the Oracle database. A file called global.asa contains all database connection information for ACAS.

Internet Information Server (IIS) manages the database connections that keep session and application variables populated with relevant and expected information for the chosen session. Most of the .asp pages within ACAS refer to application or session variables, making this an efficient and convenient way of retrieving a variety of database information quickly. The information is looked up one time, and stored in array structures or simple variable fields.   These variables can then be easily accessed within script code.

The global.asa file defines these variables, and the file ACASLogin.asp then loads them by calling a series of include files.   The ACASLogin.asp also establishes the security privilege of the user by checking the NT login id against the contents of the Oracle table ACAS_USERS. If the user is a legislator, then menu options throughout the system that offer choices of House or Senate list boxes will default to the user's associated legislative body.   If the user does not have a record in the ACAS_USERS table, then access to ACAS is denied.
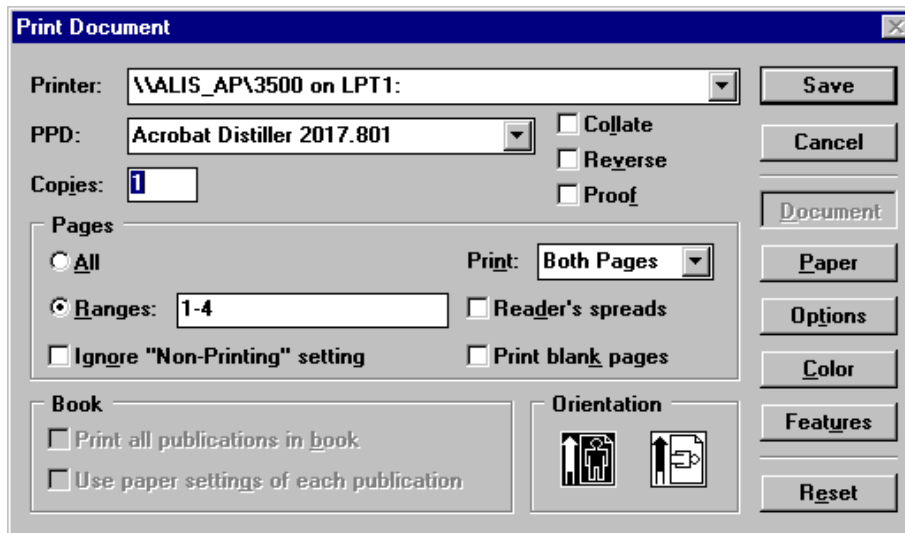
Only a user with Administrative privilege will see the Admin tab on the left hand side. This is a flag field in each record of ACAS_USERS, and can be updated using the Maintain Users function.

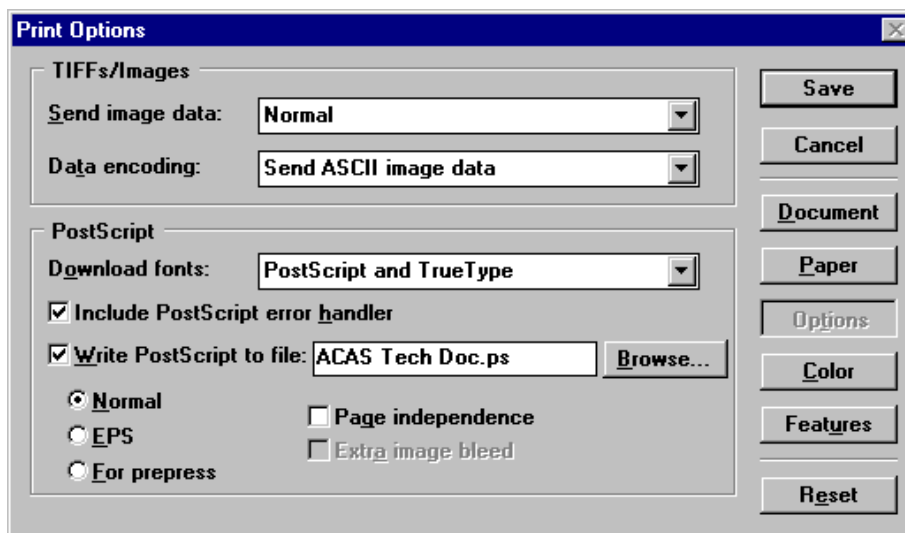## Section 4 - DOCUMENTATION METHODS

General Notes

Adobe PageMaker 6.5 was used to generate .p65 files. Each of the five documentation modules is contained in a separate file. A two step process is involved in producing the resulting .pdf files that are viewable from ACAS.

From within PageMaker, click on File... Print. The first step is to print to a PostScript printer.

Make sure the printer selected is a PostScript printer. Click on OPTIONS.

Select the checkbox for writing to a PostScript file. Specify a file name with a .ps type. Click Save. When the file is generated, find the Adobe Acrobat Distiller 3.0 under Start, Programs. Follow the prompts in selecting the newly generated .ps file as input, then naming the output file with a file type of .pdf.

The screen captures used in the PageMaker documents were created with the use of a tool called HyperSnap (formerly SnapShot/32). Each image was captured as a GIF file, then imported into the PageMaker documents using the Place command under the File menu option.